

Whitman, Requardt & Associates, LLP

Engineers · Architects · Environmental Planners

Est. 1915

Date: February 6, 2015

Mr. Bryant Thomas Water Permit and Planning Manager Virginia Department of Environmental Quality (DEQ) 13901 Crown Court, Woodbridge, VA 22193

Re:

System Capacity Confirmation in Support of the Waiver Request for Nokesville/Fitzwater Wastewater

Pumping Station.

Dear Mr. Thomas:

Whitman, Requardt and Associates (WRA) is designing the Nokesville/ Fitzwater wastewater pumping station in Prince William County for the Prince William County Service Authority (PWCSA). The new pumping station will replace the existing wastewater pumping station, which was constructed in the 1960's.

The existing station is an in-ground packaged drywell and wet well type, serving a small mixed use area. Currently the wastewater is pumped through a 6-inch diameter ductile iron force main to the gravity system at Fitzwater Drive. The proposed design will utilize the exiting wet well as a grinder chamber and wastewater will flow to a new wet well with submersible pumps. A new force main is proposed in a new alignment which will discharge into the gravity system in close proximity to the current discharge point. Based on a 1999 pump draw down test, the pumping rate is 150 GPM. A draw down test was conducted in May 2014, which confirmed an average pumping rate of 128.9 GPM. The proposed pumps will match the original design to pump at 150 GPM because no growth in the area is anticipated.

The proposed design flows do not exceed the original design flows and the point of proposed discharge is very close to the current discharge location. Additionally, WRA and PWCSA staff has confirmed that the downstream conveyance system in the area has had no history of overflows. Based on these findings, we request that the waiver to the Occoquan Policy be granted.

Very truly yours,

Whitman, Requardt & Associates, LLP

Junaid Malik, P.E.

Senior Project Engineer

Enclosures

cc: File

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